



PCT

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/674,368B

DATE: 08/26/2004
TIME: 17:11:36

Input Set : A:\PTO.FG.txt
Output Set: N:\CRF4\08262004\I674368B.raw

3 <110> APPLICANT: American Cyanamid Company
5 <120> TITLE OF INVENTION: Vaccines Containing Recombinant Pilin Against Neisseria gonorrhoeae or
6 Neisseria meningitidis
W--> 7 <130> FILE REFERENCE: 33377-00/PCT
C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/674,368B
C--> 9 <141> CURRENT FILING DATE: 2000-10-27
9 <160> NUMBER OF SEQ ID NOS: 24
11 <170> SOFTWARE: PatentIn version 3.1
13 <210> SEQ ID NO: 1
14 <211> LENGTH: 504
15 <212> TYPE: DNA
16 <213> ORGANISM: Artificial
18 <220> FEATURE:
19 <221> NAME/KEY: CDS
20 <222> LOCATION: (1)..(501)
21 <223> OTHER INFORMATION: Chimeric of Neisseria meningitidis Class I and Neisseria gonorrhoeae

ENTERED

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25 atg gat acc ctt caa aaa ggc ttt acc ctt atc gag ctg atg att gtg		48
26 Met Asp Thr Leu Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val		
27 1 5 10 15		
29 atc gcc atc gtc ggc att ttg gcg gca gtc gcc ctt ccc gcc tac caa		96
30 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln		
31 20 25 30		
33 gac tac acc gcc cgc gcg caa gtt tcc gaa gcc atc ctt ttg gcc gaa		144
34 Asp Tyr Thr Ala Arg Ala Gln Val Ser Glu Ala Ile Leu Ala Glu		
35 35 40 45		
37 ggt caa aaa tca gcc gtt acc gag tat tac ctg aat cac ggc gaa tgg		192
38 Gly Gln Lys Ser Ala Val Thr Glu Tyr Tyr Leu Asn His Gly Glu Trp		
39 50 55 60		
41 ccc ggc aac aac act tct gcc ggc gtg gca tct tct tca aca atc aaa		240
42 Pro Gly Asn Asn Thr Ser Ala Gly Val Ala Ser Ser Ser Thr Ile Lys		
43 65 70 75 80		
45 ggc aaa tat gtt aag gaa gtt aca gtc gca aac ggc gtc att acc gcc		288
46 Gly Lys Tyr Val Lys Glu Val Thr Val Ala Asn Gly Val Ile Thr Ala		
47 85 90 95		
49 aca atg ctt tca agc ggc gta aac aaa gaa atc caa ggc aaa aaa ctc		336
50 Thr Met Leu Ser Ser Gly Val Asn Lys Glu Ile Gln Gly Lys Lys Leu		
51 100 105 110		
53 tcc ctg tgg gcc aag cgt caa gac ggt tcg gta aaa tgg ttc tgc gga		384
54 Ser Leu Trp Ala Lys Arg Gln Asp Gly Ser Val Lys Trp Phe Cys Gly		
55 115 120 125		
57 cag ccg gtt acg cgc acc gac gcc aaa gcc gac acc gtc gcc gcc		432

58 Gln Pro Val Thr Arg Thr Asp Ala Lys Ala Asp Thr Val Ala Ala Ala

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59 130 135 140
 61 gcc aag acc gcc gac aac atc aac acc aag cac ctg ccg tca acc tgc 480
 62 Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys
 63 145 150 155 160
 65 cgc gac gca agt gat gcc agc taa 504
 66 Arg Asp Ala Ser Asp Ala Ser
 67 165
 70 <210> SEQ ID NO: 2
 71 <211> LENGTH: 167
 72 <212> TYPE: PRT
 73 <213> ORGANISM: Artificial
 W--> 74 <220> FEATURE:
 W--> 76 <221> NAME/KEY: amino acid
 77 <222> LOCATION: (1)..(167)
 78 <223> OTHER INFORMATION: Chimeric of Neisseria meningitidis Class I and Neisseria gonorrhoeae
 80 <400> SEQUENCE: 2
 82 Met Asp Thr Leu Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val
 83 1 5 10 15
 86 Ile Ala Ile Val Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln
 87 20 25 30
 90 Asp Tyr Thr Ala Arg Ala Gln Val Ser Glu Ala Ile Leu Ala Glu
 91 35 40 45
 94 Gly Gln Lys Ser Ala Val Thr Glu Tyr Tyr Leu Asn His Gly Glu Trp
 95 50 55 60
 98 Pro Gly Asn Asn Thr Ser Ala Gly Val Ala Ser Ser Ser Thr Ile Lys
 99 65 70 75 80
 102 Gly Lys Tyr Val Lys Glu Val Thr Val Ala Asn Gly Val Ile Thr Ala
 103 85 90 95
 106 Thr Met Leu Ser Ser Gly Val Asn Lys Glu Ile Gln Gly Lys Lys Leu
 107 100 105 110
 110 Ser Leu Trp Ala Lys Arg Gln Asp Gly Ser Val Lys Trp Phe Cys Gly
 111 115 120 125
 114 Gln Pro Val Thr Arg Thr Asp Ala Lys Ala Asp Thr Val Ala Ala Ala
 115 130 135 140
 118 Ala Lys Thr Ala Asp Asn Ile Asn Thr Lys His Leu Pro Ser Thr Cys
 119 145 150 155 160
 122 Arg Asp Ala Ser Asp Ala Ser
 123 165
 126 <210> SEQ ID NO: 3
 127 <211> LENGTH: 510
 128 <212> TYPE: DNA
 129 <213> ORGANISM: Artificial
 131 <220> FEATURE:
 132 <221> NAME/KEY: CDS
 133 <222> LOCATION: (1)..(507)
 134 <223> OTHER INFORMATION: Chimeric of Neisseria meningitidis Class II and Neisseria gonorrhoeae
 137 <400> SEQUENCE: 3
 139 atg gaa gca atc caa aaa ggt ttc acc ctg atc gag ctg atg atc gtc 48
 140 Met Glu Ala Ile Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val

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141 1	5	10	15			
143 atc	gcc	atc	gtc	ggt atc ttg gca gcc gtc	gcc ctg ccc gca tac caa	96
144 Ile	Ala	Ile	Val	Gly Ile Leu Ala Ala Val	Ala Leu Pro Ala Tyr Gln	
145	20		25		30	
147 gac	tac	acc	gct	cgc gcc caa atg tcc	gaa gcc ctg act ttg gca gaa	144
148 Asp	Tyr	Thr	Ala	Arg Ala Gln Met Ser	Glu Ala Leu Thr Leu Ala Glu	
149	35		40		45	
151 ggt	caa	aaa	tcc	gca gtg atc gag tat tat	tcc gac aac ggc aca ttc	192
152 Gly	Gln	Lys	Ser	Ala Val Ile Glu Tyr Tyr	Ser Asp Asn Gly Thr Phe	
153	50		55		60	
155 ccg	aac	agc	aat	act tcc gca ggt att	gct gcc tct aac gag att aaa	240
156 Pro	Asn	Ser	Asn	Thr Ser Ala Gly Ile Ala	Ala Ser Asn Glu Ile Lys	
157	65		70		75	80
159 ggt	aag	tat	gtg	gca tcg gtt aag	gta ggt aat gcc tct gtt gct	288
160 Gly	Lys	Tyr	Val	Ala Ser Val Lys Val	Glu Gly Asn Ala Ser Val Ala	
161	85		90		95	
163 tct	att	acc	gct	acc atg aac tct	agt aat gtg aat aag gac atc aaa	336
164 Ser	Ile	Thr	Ala	Thr Met Asn Ser Ser Asn	Val Asn Lys Asp Ile Lys	
165	100		105		110	
167 ggt	aaa	acc	ttg	gta ctc gtc	ggc aaa caa aac tcc ggt tcg gta aaa	384
168 Gly	Lys	Thr	Leu	Val Leu Val Gly Lys Gln Asn Ser	Gly Ser Val Lys	
169	115		120		125	
171 tgg	ttc	tgc	gga	cag ccg gtt acg	cgc gac aac gcc gac aac gac gac	432
172 Trp	Phe	Cys	Gly	Gln Pro Val Thr Arg Asp Asn	Ala Asp Asn Asp Asp	
173	130		135		140	
175 gtc	aaa	gac	gcc	ggc aac aac ggc atc	gaa acc aag cac ctg ccg tca	480
176 Val	Lys	Asp	Ala	Gly Asn Asn Gly Ile Glu	Thr Lys His Leu Pro Ser	
177	145		150		155	160
179 acc	tgc	cgc	gat	acg tca tct	gat gcc aaa	
180 Thr	Cys	Arg	Asp	Thr Ser Ser Asp Ala		510
181	165					
184 <210>	SEQ ID NO:	4				
185 <211>	LENGTH:	169				
186 <212>	TYPE:	PRT				
187 <213>	ORGANISM:	Artificial				
189 <220>	FEATURE:					
W--> 190 <221>	NAME/KEY:	amino acid				
191 <222>	LOCATION:	(1)..(169)				
192 <223>	OTHER INFORMATION:	Chimeric of Neisseria meningitidis Class II and Neisseria gonorrhoeae				
194 <400>	SEQUENCE:	4				
196 Met	Glu	Ala	Ile	Gln Lys Gly Phe Thr Leu Ile Glu Leu Met Ile Val		
197 1	5		10		15	
200 Ile	Ala	Ile	Val	Gly Ile Leu Ala Ala Val Ala Leu Pro Ala Tyr Gln		
201	20		25		30	
204 Asp	Tyr	Thr	Ala	Arg Ala Gln Met Ser	Glu Ala Leu Thr Leu Ala Glu	
205	35		40		45	
208 Gly	Gln	Lys	Ser	Ala Val Ile Glu Tyr Tyr	Ser Asp Asn Gly Thr Phe	
209	50		55		60	
212 Pro	Asn	Ser	Asn	Thr Ser Ala Gly Ile Ala	Ala Ser Asn Glu Ile Lys	

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213	65	70	75	80
216	Gly Lys Tyr Val Ala Ser Val Lys Val Glu Gly Asn Ala Ser Val Ala			
217	85	90	95	
220	Ser Ile Thr Ala Thr Met Asn Ser Ser Asn Val Asn Lys Asp Ile Lys			
221	100	105	110	
224	Gly Lys Thr Leu Val Leu Val Gly Lys Gln Asn Ser Gly Ser Val Lys			
225	115	120	125	
228	Trp Phe Cys Gly Gln Pro Val Thr Arg Asp Asn Ala Asp Asn Asp Asp			
229	130	135	140	
232	Val Lys Asp Ala Gly Asn Asn Gly Ile Glu Thr Lys His Leu Pro Ser			
233	145	150	155	160
236	Thr Cys Arg Asp Thr Ser Ser Asp Ala			
237	165			
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241	<211> LENGTH: 30			
242	<212> TYPE: DNA			
243	<213> ORGANISM: Neisseria gonorrhoeae			
245	<400> SEQUENCE: 5			
246	ccccgcgccttggatacccttcaaaaaaggc		30	
249	<210> SEQ ID NO: 6			
250	<211> LENGTH: 30			
251	<212> TYPE: DNA			
252	<213> ORGANISM: Neisseria gonorrhoeae			
254	<400> SEQUENCE: 6			
255	gggcctggatccgtggaaa tcacttaccg		30	
258	<210> SEQ ID NO: 7			
259	<211> LENGTH: 29			
260	<212> TYPE: DNA			
261	<213> ORGANISM: Neisseria gonorrhoeae			
263	<400> SEQUENCE: 7			
264	ggctctagac tgcacacca agtttactc		29	
267	<210> SEQ ID NO: 8			
268	<211> LENGTH: 27			
269	<212> TYPE: DNA			
270	<213> ORGANISM: Neisseria gonorrhoeae			
272	<400> SEQUENCE: 8			
273	ggctctagat tgaaggcattt atcaggg		27	
276	<210> SEQ ID NO: 9			
277	<211> LENGTH: 28			
278	<212> TYPE: DNA			
279	<213> ORGANISM: Neisseria gonorrhoeae			
281	<400> SEQUENCE: 9			
282	ggctctagat aaacagtaat acaagggg		28	
285	<210> SEQ ID NO: 10			
286	<211> LENGTH: 28			
287	<212> TYPE: DNA			
288	<213> ORGANISM: Neisseria gonorrhoeae			
290	<400> SEQUENCE: 10			
291	ggctctagat tagaaaaact catcgagc		28	

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Input Set : A:\PTO.FG.txt
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294 <210> SEQ ID NO: 11
295 <211> LENGTH: 36
296 <212> TYPE: DNA
297 <213> ORGANISM: Neisseria meningitidis Class I
299 <400> SEQUENCE: 11
300 ccccgcgcca tggacaccct tcaaaaaggt tttacc 36
303 <210> SEQ ID NO: 12
304 <211> LENGTH: 39
305 <212> TYPE: DNA
306 <213> ORGANISM: Neisseria meningitidis Class I
308 <400> SEQUENCE: 12
309 gggcctggat ccgagtgcc gtggaaaatc acttaccgc 39
312 <210> SEQ ID NO: 13
313 <211> LENGTH: 31
314 <212> TYPE: DNA
315 <213> ORGANISM: Neisseria meningitidis Class I
317 <400> SEQUENCE: 13
318 ccggcgcgctc tctcacggcg aatggcccg c 31
321 <210> SEQ ID NO: 14
322 <211> LENGTH: 39
323 <212> TYPE: DNA
324 <213> ORGANISM: Neisseria meningitidis Class I
326 <400> SEQUENCE: 14
327 gggcctggat ccgagtgcc gtggaaaatc acttaccgc 39
330 <210> SEQ ID NO: 15
331 <211> LENGTH: 25
332 <212> TYPE: DNA
333 <213> ORGANISM: Neisseria gonorrhoeae
335 <400> SEQUENCE: 15
336 gcataattcg tgtcgctcaa ggcgc 25
339 <210> SEQ ID NO: 16
340 <211> LENGTH: 34
341 <212> TYPE: DNA
342 <213> ORGANISM: Neisseria gonorrhoeae
344 <400> SEQUENCE: 16
345 gccgcgcgtc tcccgtgatt caggtataac tcgg 34
348 <210> SEQ ID NO: 17
349 <211> LENGTH: 25
350 <212> TYPE: DNA
351 <213> ORGANISM: Neisseria meningitidis Class I
353 <400> SEQUENCE: 17
354 gcataattcg tgtcgctcaa ggcgc 25
357 <210> SEQ ID NO: 18
358 <211> LENGTH: 39
359 <212> TYPE: DNA
360 <213> ORGANISM: Neisseria meningitidis Class I
362 <400> SEQUENCE: 18
363 gggcctggat ccgagtgcc gtggaaaatc acttaccgc 39
366 <210> SEQ ID NO: 19

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/26/2004
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Input Set : A:\PTO.FG.txt
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4

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L:7 M:283 W: Missing Blank Line separator, <130> field identifier
L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:74 M:283 W: Missing Blank Line separator, <220> field identifier
L:76 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:2
L:190 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:4